

**ABSTRACT**

Oligomers of polycyclic olefin monomers, and optionally allylic or olefinic monomers, and a method of making such oligomers that includes reacting polycyclic olefin monomers in the presence of a Ni or Pd containing catalyst, or in the case of allylic monomers in the presence of a free radical initiator. The oligomers can be included in photoresist compositions as dissolution rate modifiers. The photoresist compositions can further include a polymeric binder resin, a photoacid generator, and solvents.